Program Summary and Overview

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What is PHLIP?

- **A National Resource:** Information and laboratory scientists at the state and federal level- addressing highly complex technical issues critical to public health.

- **A Collaboration:** commitment to utilize NHIN IT architecture options for the exchange of electronic laboratory data at all levels of public health laboratories.

- **A Community:** to support and expand LIMS user communities, creating a process that can be applied to other highly complex problems

- **Products and Publications:** Documentation of decisions made, fiscal and human resources needed, and lessons learned. Development and dissemination of Vocabulary and Messaging guides to meet the needs of the Public Health Laboratory “harmonized” list of LOINC and SNOMED codes for nationally notifiable diseases (NND’s)

- **A Success:** The realization of common goals and national priorities in a production environment
PHLIP Building Blocks

• National collaborative process
• Provide detailed vocabulary implementation guidelines
• Build PHL capability for electronic test ordering and result reporting
• Develop and pilot data exchange architecture options
• Establish a process to help labs increase messaging capability
Projected Outcomes

- Strengthened collaborative environment for public health
- Improved data accessibility
- Improved data accuracy
- Expanded data sources for active surveillance
  - National integrated laboratory system
Governance Structure

Executive Committee (governance level guidance)
Steering Committee (technical level guidance)
Work Groups (producing deliverables)
  • Flu Messaging Implementation
  • Vocabulary and Messaging (V&M)
  • Primer WG
  • RNR-Hub Implementation
  • ETOR
  • State-to-State ETOR implementation pilot
Use Case 1: Influenza – Laboratory Surveillance

Message Format: HL7 2.3.1 ORU

Contents: Influenza Laboratory Results (WHO Global Influenza Surveillance Network)
## Metric: Thought - to - Validation

<table>
<thead>
<tr>
<th>Model</th>
<th>Time to Validation Step</th>
</tr>
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<tbody>
<tr>
<td>Pilot States</td>
<td>~ 12 months</td>
</tr>
<tr>
<td>Best-in-class, non-pilot State</td>
<td>~ 5 months</td>
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<tr>
<td>States with PAT involvement</td>
<td>Under a month</td>
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**Executive Committee Charge:** Expand the implementation of the ELSM for Influenza reporting to CDC Epi to all states as soon as possible, utilizing the PHLIP vocabulary.

- Main focus of PHLIP
- Detailed standard vocabulary mapping tools developed
- Successful deployment of two (2) traveling PHLIP assistance teams (PATs).
  - PATs are supporting about 20
    - 8 states virtually
    - 11 states via on site hands on assistance (since March)
- Seven states are sending production level seasonal and novel strain flu results to CDC Flu Division.
- Eight more states are in validation and are committed to go live by June 30th.
Use Case 2: Testing Service Requests – State to CDC

Message Format:

- Order = HL7 2.6 ORM
- Result = HL7 2.6 OUL

Contents: Salmonella & Bacillus Anthracis Orders and Results
Executive Committee Charge: Complete the full range of specimen and tests for Salmonella, B. Anthracis, and Influenza before moving to implementing other NNDs and beyond for the ETOR messages.

- 99.8% of the content and structure of standardized message complete.
  - Waiting for CLIA guidance and final steering committee decision on one issue related to specimen type.

- CDC labs- completing final customizations to the STARLiMS product (in order to consume order)

- CDC labs- working with PHITPO on connections from central brokering to the labs.
Use Case 3: Testing Service Requests – State to State

Message Format:

- Order = HL7 2.6 ORM
- Result = HL7 2.6 OUL

Contents: Influenza Orders and Results for Surge Capacity/Mutual Assistance
Successfully piloted the exchange of Influenza data using the PHLIP ETOR message structure for state-to-state messaging for influenza surge capacity and mutual assistance (SCMA).

- Pilot one: Iowa, Nebraska, and Minnesota
- Pilot two: Florida and Texas

Pilot proved utility of the message structure and opened the door for a second phase pilot (pending state funding).
Use Case 4 Architecture Support — Route not Read (RnR) Hubs

- **Direct Send:** COMPLETE
- **Phase 1:** Implement RnR Hubs in FL and NE - COMPLETE
- **Phase 2:** Develop Hub-to-Hub Interoperability - COMPLETE
- **Phase 3:** CDC develop capability to exchange messages with RnR Hubs - COMPLETE
Executive Committee Charge: Plan for the long-term PHLIP architecture, with the expectation that the RnR hubs will serve as a connection to both the NHIN and the State Health Information Networks.

- Two RnR hubs in production since September ‘09.
  - Nebraska
  - Florida
- All states moving into production will use one of two hubs.
- CDC is able to poll the hubs to capture data.
- A Memorandum of Understanding between labs and APHL has been developed and will be circulated to PHLs.
- Future: Work with the ONC NHINConnect technical staff and the CDC to establish the mechanism for the RnR hubs to be used as a pilot for NHIN architecture for the PHL to Clinical Lab use case.
Use Case 4: Collaboration

- Harmonize PHLIP efforts with other national efforts including LRN, NHIN, Environmental, Newborn Screening, ELR, etc.

*JPHIT partners:
- APHL
- ASTHO
- CSTE
- NACCHO
- NAHDOS
- NAPHSIS
- PHDSC

*Status: APHL is facilitating collaboration progress across multiple organizations*
Collaborative Efforts

Executive Committee Charge: Expand the PHLIP community and the marketing of PHLIP to other partners and throughout the Federal and State governments

- Instrumental in the design and launch of JPHIT community
- Participate in CSTE ELR calls
- Collaborate with CDC Lab CoP and LIMSi groups before making vocabulary recommendations
- Reviewing CSTE technical implementation guides and sharing harmonized data when available.
- Performed a PHLIP/NEDSS data element comparison
- Represent the Lab community on the Secretary’s advisory council for new born screening
- Policy statement about Electronic Data exchange in the environmental domain.
- Two SPHL directors representing APHL on CDC/CSTE ELR Executive Committee.
Future Direction -

Use Case 6

Service Requests – State to Clinical/Commercial Partners

- HL7 Test Order from Clinical/Commercial Lab Partner to State Public Health Lab (PHL)
- HL7 Test Result from State PHL to Clinical/Commercial Lab Partner
- A number of PHLIP SPHLs already have this in place with their clinical partners (different HL7 versions)
- Begin with Quest and expand to other Commercial and Clinical Lab Partners

**Message Format:**
- Order = HL7 2.6 ORM or translate to earlier HL7 versions and messages
- Result = HL7 2.6 OUL or translate to earlier HL7 versions and messages

**Contents:** Decide on which disease to start with Orders and Results

**Status:** In progress, RnR hub connection established to SPHLs
Poised and ready to...

- Apply PHLIP methodologies in supporting ARRA funded grantees in both the public health and clinical domain.
- Expand PHLIP use cases based on the direction and support of the Executive Committee.
- Augment our architecture design to expand to and support other data exchange partners such as clinical labs and state public health agencies.
In the meantime...PAT teams are ready to support YOU!

Pre-visit

Visit

Post-visit

Go Live
APHL & SPHLs: Climbing the Mountain Together
Thank You!

For further information contact

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